## SEQUENCE LISTING

<110>	OKADA, Hidechika OKADA, Noriko							
<120>	Human IgM antibody inducing apoptosis in HIV-infecte cells and remedy for HIV-infection							
<130>	Q112017							
<140> <141>	US 10/519,855 2005-09-14							
<150> <151>	PCT/JP2003/008305 2003-06-30							
<150> <151>	JP 2003-74316 2003-03-18							
<150> <151>	JP 2002-227953 2002-07-01							
<160>	8							
<170>	PatentIn version 3.3							
<210> <211> <212> <213>	1 470 DNA Homo sapiens							
<220> <223>	variable region of human immunoglobulin mu chain							
<400> tgccct	1 ggat tccaaggcct atccacttgg tgatcagcac tgagcaccga ggattcacca	60						
tggaac	tggg gctccgctgg gttttccttg ttgctatttt agaaggtgtc cagtgtgagg	120						
tgcagc	tggt ggagtctggg ggaggcctgg tcaagcctgg ggggtccctg agactctcct	180						
gtgcag	cctc tggattcacc ttcagtactt atagcatgaa ctgggtccgc caggctccag	240						
ggaagg	ggct ggagtgggtc tcatccatta gtagtagtag tagttacata tactacgcag	300						
actcag	tgaa gggccgattc accatctcca gagacaacgc caagaactca ctgtatctgc	360						
aaatga	acag cctgagagcc gaggacacgg ctgtgtatta ctgtgcgaga gatctcctta	420						
tagcag	tggc tggccactgg ggccagggaa ccctggtcac cgtctcctca	470						
<210> <211> <212> <213>	2 404 DNA Homo sapiens							
<220> <223>	variable region of human immunoglobulin kappa chain							
<400> ctcagt	2 cagg acacagcatg gacatgaggg tccctgctca gctcctggga ctcctgctgc	60						
tctggc	tccc agataccaga tgtgacatcc agatgaccca gtctccatcc tccctgtctg (1/4)	120						

catctgtagg agacagagtc accatcactt gccgggcgag tcagggcatt agcaattatt 180 tagcctggta tcagcagaaa ccagggaaag ttcctaaact cctgatctat gctgcatcca 240 ctttgcaatc aggggtccca tctcggttca gcggcagtgg atctgggaca gatttcactc 300 tcaccatcag cagcctgcag cctgaagatg ttgcaactta ttactgtcaa aagtataaca 360 gtgccccgta cacttttggc caggggacca agctggagat caaa 404

<210> 3 <211> 137

<212> PRT <213> Artificial Sequence

<220> <223> Synthetic 2G9 antibody variable region

 $<\!400\!>~3$  Met Glu Leu Gly Leu Arg Trp Val Phe Leu Val Ala Ile Leu Glu Gly 1 5 10 15

Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys 20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe 35 40 45

Ser Thr Tyr Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu 50 60

Glu Trp Val Ser Ser Ile Ser Ser Ser Ser Tyr Ile Tyr Tyr Ala 65 70 75 80

Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn 85 90 95

Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$ 

Tyr Tyr Cys Ala Arg Asp Leu Leu Ile Ala Val Ala Gly His Trp Gly 115 120 125

Gln Gly Thr Leu Val Thr Val Ser Ser 130 135

<210> 4

<210> 4 <211> 411

<212> DNA <213> Artificial Sequence

<220> <223> Synthetic DNA encoding 2G9 antibody variable region (2/4)

<400> atagaat	4 tag	gtttacgttg	agtttttta	gttgctattt	tagaaggtgt	tcaatgtgaa	60
gttcaat	tag	ttgaatctgg	tggtggttta	gttaaacctg	gtggttcttt	acgtttatct	120
tgtgctg	ctt	ctggttttac	tttttctact	tattctataa	attgagttcg	tcaagctcct	180
ggtaaag	gtt	tagaatgagt	ttcttctatt	tcttcttctt	cttcttatat	ttattatgct	240
gattctg	tta	aaggtcgttt	tactatttct	cgtgataatg	ctaaaaattc	tttatattta	300
caaataa	att	ctttacgtgc	tgaagatact	gctgtttatt	attgtgctcg	tgatttatta	360
attgctg	ttg	ctggtcattg	aggtcaaggt	actttagtta	ctgtttcttc	t	411
<211> <212> <213>		ficial Sequ		9 antibody <sup>y</sup>	variable re	gion	
~400 <u>&gt;</u>	5						60
					tggagggcgt		60 120
					gcggctcctt		
					actgggtccg		180
					cctcctacat		240
						cttgtacttg	300
						cgacttgttg	360
atcgccg	gtcg	ccggccactg	gggccagggc	accttggtca	ccgtctcctc	С	411
<210> <211> <212> <213>	6 121 DNA Art	ificial Seq	uence				
<220> <223> Synthetic mu-chain plasmid construct encoding 2G9-antibody fragment							
<220> <221> <222> <223>	(11)	c_feature 0)(119) s a, c, g,	or t				
<400>	6 ccac	catggaactg	gggctccgct	gggttttcct	: tgttgctatt	ttagaaggtg	60
tccagtgtga ggtgcagctg gtggagtctg ggggaggcct ggtcaagccn nnnnnnnnng							120
g							121

```
121
<211>
<212>
<213>
       DNA
       Artificial Sequence
<220>
       Synthetic mu-chain plasmid construct encoding 2G9-antibody
<223>
        fragment
<220>
<221>
<222>
<223>
       misc_feature
        (7)..(16)
       n is a, c, g, or t
aattccnnnn nnnnnnggct tgaccaggcc tcccccagac tccaccagct gcacctcaca
                                                                               60
ctggacacct tctaaaatag caacaaggaa aacccagcgg agccccagtt ccatggtggg
                                                                               120
                                                                               121
g
<210>
        8
        32
<211>
<212>
       PRT
<213> Artificial Sequence
<220>
       Synthetic 2G9-antibody fragment
<223>
<400>
       8
Met Glu Leu Gly Leu Arg Trp Val Phe Leu Val Ala Ile Leu Glu Gly 1 \hspace{1cm} 10 \hspace{1cm} 15
Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys
```